

**UCLA**  
**Mester**

**Title**

El criterio básico de diagnóstico rinolinal y complejo.

**Permalink**

<https://escholarship.org/uc/item/8032v5j8>

**Journal Mester, 49 (1)**

**ISSN 0160-2764**

**Authors**

Naila Huseynova

**Publication Date 2020**

Peer reviewed

## The basic criterion of rhinolal and complex diagnostics.

*Naila Huseynova\**

Head of Department of the "Special Education" of Azerbaijan State Pedagogical University

**Key words:** rhinolalia, anatomical and physiological defects of the speech apparatus, articulation mechanism, palatopharyngeal closure.

### **Abstract:**

Rinolalia is a violation of the pronunciation and timbre of the voice due to anatomical and physiological defects of the vocal system. He should be able to determine what is the second most important factor in determining the correction correction in children with rhinolalia. The success of correctional tasks depends on the correct and timely determination of spelling, its level of severity and the start of corrective tasks. Rinolalia is a violation of pronunciation and speaking time caused by anatomical and physiological defects of the vocal system. This defect is often called "silence". During rinolalia, the articulation mechanism, dehydration and noise generation are not normal due to a violation of the nasal cavity and the oral cavity. Depending on the esophagus, there are the following forms of rhinolalia: closed, open and mixed. This disease has such specific symptoms that parents cannot deny it. The main symptoms are unclear or poorly understood speech, a delay in the child's first words and many psychological symptoms. In many cases, the correct diagnosis is not a problem, but it can be difficult to determine what type of disease is present. In this context, the diagnosis is complex and includes consultations with specialists from various fields of medicine.

### **Introduction**

Treatment for children is based on more conservative methods, but most forms of the disease require surgery.

The pathogenesis of the disease is due to the poor relationship between the nasal cavity and the esophagus. It also leads to improper airflow during sound generation, which also distorts the pronunciation. Violations of time and sound pronunciation can be initial or acquired - in each

---

\* <https://doi.org/10.1043.48.2019.5/5.9>

case, the tilt factors will be different.

The etiological causes of rhinolalia contribute to the separation of its clinical forms. The functional and organic causes of congenital fractures of the throat and lips can be as follows:

- severe illness of the mother during the first three months of pregnancy (toxoplasmosis, obesity, mumps, flu and other infectious processes);
- the presence of toxic substances in the body of a woman during pregnancy;
- endocrine disorders before or during pregnancy;
- genetically - hereditary factors;
- addiction of pregnant women to drugs, alcohol or nicotine;
- open sore throat caused by diphtheria;
- anatomical changes in the nose or nose;
- violation of the integrity of the soft or hard palate;
- cracks in the upper jaw or upper lip;
- dyspnea of the soft palate;
- language pathology (can be attributed to its absence or vice versa); etc.

There are 3 forms of rhinolalia, which are determined by the nasal cavity and inadequate communication of the oral cavity:

- open rhinolalia;
- Internal rhinolalia;
- mixed rhinolalia.

Functional open rhinolalia due to various reasons. This joint is associated with insufficient elevation of the soft palate during phonation in a child with a fuzzy joint. In a functional study of the open form of rhinolalia, changes in the soft or hard palate were not detected.

Closed rhinolalia is due to the low physiological resonance of the nose when pronouncing speech sounds. The strongest resonance in the nostrils is m, m', n, n'. During their normal pronunciation, the nasal cavity remains open, and air passes directly through the nasal cavity. The reason for the closed form is functional disturbances in the nose or throat compression. Organic changes are caused by the disease, causing nasal breathing.

Mixed rhinolalia is referred to as a speech condition characterized by a low level of resonance of the nose when pronouncing nasal sounds and in the presence of a nasal rhythm (nasal sound). This is due to the combination of the nasal passage and the lack of a functional and organic connection of the esophagus. The most common cause is dyspnea of the soft palate, its mucous slit and the growth of adenoids, which in such cases prevents air from entering the nose when pronouncing oral sounds. After an adenotomy, speech conditions may worsen as a result of a rapid heartbeat, and symptoms of open rhinolalia appear.

The most common forms of maxillofacial pathology are fractures of the soft and soft palate. The prevalence of this anomaly, which led to rhinolalia, was significantly increased in the USSR: annually 5,000 children are born with a cleft palate (M. Dubov, 1960). According to L. Ya. Frolova (1962), one out of every 1000 newborns is born with fractures of the lips and palate. The frequency of cracks tends to increase (Qutsay, 1980).

In mild and severe fractures, there are a number of disorders in the speech bone apparatus: narrowing of the upper jaw, flexion of the upper limbs, deformation of the upper skin teeth, changes in the orientation of the lower jaw and changes in the base position of the jaws. According to Y. Domrachev (1970), anomalies of the tooth line are observed in 80-90% of

children with spinal cord.

In practice, more cracks in the lips and palate are found in the crack. The shapes of the fissures in the hips are excessive, and they all cause speech distortion (we just cut the cheekbones along the edge of the mouth, although the speech persists). Often only the upper lip is observed.

It is necessary to distinguish between partial and full lips. Partial fractures are considered fractures when only the edges of the lips are not combined, that is, the defect does not reach the lower nostrils. A complete crack is considered when it covers both the lower nostrils and the front of the nostrils. Dimensions can be one-sided and one-sided.

The shape and size of the sky are very different. They vary in size (length) and location. Bilateral and unilateral vein fractures are separated. Bilateral cleft bilateral and unilateral. Unilateral splitting is complete, incomplete and mucous.

Bilateral cleft is characterized by the fact that the upper jaw does not connect along the midline, between the lips, alveolar processes, soft and hard palate. A cleft is called bilateral if the cleft passes through either side of the bones and there is no separation between the femur and the nasal part. If one side is separated by a bone marrow and a divided nose, then half is called bilateral (right or left).

Even when the mucous membrane is sufficiently developed, with such a lag in development, secretion of the anterior (sumbucous) fracture is also observed in combination with a weakening of the muscular system of the soft palate in thin sections of the throat bones.

Each fracture, even a crack in the mucosa, causes the posterior part of the skeleton to be tightened, causing the entire soft palate to glide forward. Thus, the entire throat is shortened, and the distance between the soft palate and the posterior wall of the lumen increases (A. A. Limberg, 1927).

Inadequate development of vertical steel rods in search of the bottom line and the wooden hinge. Somehow the limbs are cut off or moved on the globes, and they are set in a serrated hood. In the Result of the Horned Ponytail Pigeon Fruit (Dubov MD, Rodriguez, 1960, page 21).

As soon as it was discarded, children, Christmas carrots and goblets, or moguls, did not get caught. Poetic reflex digestive enzymes. Double bubbles are easy to digest all the lice.

The small discoloration of the rubber melts the physiologic compounds. It has a normal rebuilding system for freezing through inadequate poles and poles and pops up inside an inverted system. Left unbearable or sluggish slip-ups and gluten free. As a result of incomplete shifting of the camera, it is clear that the camera is fitted with a light tank. Due to the wrong trailer, the cameras are discarded, and the retractable cameras are not being turned off. Polished oatmeal cools overflowing with slender pegs and irritated pout.

The child's instinctive instincts are to be attributed to the defect in birth. Stage adaptation is provided in the specification of the lens in the rostrum. Rebound weaved slightly unnecessarily sharp, so long as the arsenal of the cat is cut off, and in the end the cornea is twisted. Regular image, friendly access to your feet, protects your skin from harm and loss. Stability is slowly being stabilized in the countryside. Children are born with anomalies that do not go on the spin, it is very difficult to make a summer globe.

For the sake of the goodness of the good and the good and the good and the good. As soon as the gluten is put on it, the cat is going to get it right. There is a conflict between the mammals, and the matter is described by them.

Rebenoches with reflexively loaded feeders are followed by a lively feed and greater function of the cornea, the simpler ones.

Permanent image, realization and function of the dream (khanyan, pittany) is the most important thing in the world, in order to be able to translate it into pure language.

There is a vertical font size, so that there is an open source, a vertical spring, has a shape of the cornea, a perpendicular barrier, and a lattice bar. The opening is popping up in a rust, not too far off, it stops and resonates. Reverberation. This is the same thing as a bad passage.

In a steady state of the root of the tongue, the tip of the tongue extends to the middle of the oral cavity. All movements of the tongue are inhibitory, only the tip of the tongue remains relatively moving. In this state of the language, the actions necessary for the articulation of speech sounds are not performed by the rhinoks. Recognizing their speech defects, children are trying to find ways to compensate for this. Sometimes during speech, they squeeze the nostrils and show facial muscles of the face. As a result, children's speech is unpleasant for both hearing and articulation, as well as for the external structure (excessive movements of the wings of the nose and muscles of the face).

In rhino speech, articulations are sometimes close to normal, but their pronunciation is poorly understood by hearing, since speech is distorted, and also affects the muscles of the face, which, in turn, has an effect. ,

Thus, during rhinolalia, the pronunciation of the voice is completely impaired. In patients, self-awareness of speech defects is usually absent or its criticality is low. Listening to audio recordings of your speech stimulates serious speech therapy exercises in patients.

Thus, in the structure of speech activity in rhinolalia, a defect in the phonetic-phonemic region of speech is considered a leading disorder, while at the same time, a violation of the phonetic formation of speech is the main one. This initial defect has little effect on the formation of the lexical-grammatical field of speech, but its profound changes are usually detected only when rhinolism is combined with other speech disorders.

Purposeful work to eliminate speech defects contributes to the creation of positive character traits, stimulates the development of high mental functions.

Thus, congenital cleft has a negative effect on the formation of the child's body and the development of high mental functions. Patients find ways to compensate for the defect, which leads to improper interaction of the joint muscles. This initial disorder is considered a violation of the phonetic form of speech and acts as the main disorder in the structure of the defect. This disorder causes a second disorder of speech and mental state of the patient. In addition, this group of patients has great adaptive and compensatory capabilities for the restoration of impaired functions.

A comprehensive study of clinical and psychological-pedagogical information is necessary to identify the specific features of speech defects, the proper organization of complex effects and ways to improve corrective work with children with a rhinocular. should be able to identify The complex problems of speech disorders require the correct classification of the pathological symptoms that prove the illness of the child.

Various research methods are used: familiarization with medical documentation; Pedagogical supervision of children in the conditions of free communication and special classes; communication with doctors, parents, children; objective research methods; nasopharyngoscopy, radiography. It is important to observe the basic principles of speech

therapy in the process of creating and then eliminating any speech disorders.

These are some of the most pressing questions in the study of children born with congenital cleft upper lip and ankle.

1. The principle of complexity. Rinolalia is a complex speech disorder caused by a congenital spot of the throat and ankle, which requires a comprehensive medical, psychological and pedagogical intervention. In addition to speech therapists, surgeons, orthodontists, pediatricians, ENT, neurologists, genetics and psychologists are involved in the study of such children. This is due to the fact that cracks cause anatomical defects, which can lead to functional problems of the speech apparatus.

2. The principle of a systematic approach. Speech is a complex functional system, all its components are interconnected and interconnected. It is important to pay attention not only to the study of primary defects in the defect structure, but also to the presence of signs of secondary defects.

3. The principle of individual approach. The birth of the upper lip and anterior cleft ankle fracture is carried out only individually. Defects in the structure of this defect have different characteristics, and the speech therapist's task is to determine the individual characteristics of the speech function in each case.

4. The principle of age compliance. When examining children with rhinolin, it is important to remember that the methods and materials of the examination may vary slightly depending on the age of the child. A large number of toys, audio and mobile games, colorful educational materials, age-appropriate illustrations and thematic resources are used to identify a preschool child whose main activity is the game. The exam can be held in a playful way. ækdir.

In patients with congenital fractures of the lips and throat, the X-ray method is used as a research method. Orthopantomography is increasingly used in the treatment process. At the same time, tooth anomalies, their shape, condition and direction of the root, the presence and structure of adhesive teeth, the presence and structure of permanent teeth and adhesion were studied.

Computed tomographic diagnosis of the diagnostic model of the jaw during a clinical examination of patients with bilateral congenital fractures of the lips and throat can be used as a diagnostic tool for the use of both diagnostic and lumbar punctures in children. This allows you to accurately determine the strength of the bone tissue to select the length and diameter of microimplants for fixing the orthodontic apparatus, which greatly improves the fixation of the apparatus and eliminates damage to tooth enamel.

The problem of timely detection and detection of congenital pathologies allows solving exographic studies of the fetus. Assessment of facial features is an important part of the study at the second stage of screening for 20-24 weeks of pregnancy. Prenatal diagnosis of the skull and jaw area of the embryo allows us to know and see the pathology and develop an appropriate preventive measurement system. The first ultrasound diagnosis of a congenital fracture of the throat and lips was recorded in 1981. Two cases were reported in the third trimester. Also, transvaginal ultrasound diagnosis was recorded at 12 weeks of gestation. For early diagnosis of a throat and palate fracture, a technique was developed to reflect two surfaces of the surface of the embryo. The frontal surface reflects normal facial disorders, in which the absence of the upper jaw is felt a little forward and below the nostrils. Cracks in the nasal cavity were also noted. In the coronary cavity below the nose there is a mass of thin tissue that extends beyond the middle nostril. A complete anatomical examination is necessary, since ultrasound pathology

is found in the skull and upper jaw, with approximately 350 syndromes associated with facial deformities.

The proportion of skull and maxillofacial pathology during prenatal diagnosis depends on the operator's experience, such factors as learning factors, i.e. risk factors, as well as the duration of pregnancy and training time. Methods of prenatal diagnosis are divided directly and indirectly. Using direct methods, the condition of the fetus is studied and facial defects are detected, including fractures.

The consultation process is divided into 3 main stages:

1. Diagnostics (otherwise the board loses reliable answers);
2. Assessment of the degree of genetics;
3. Information related to the forecasts of consultants.

According to the results of the genetic consultation of 100 parents with children with a congenital upper lip and spinal cord revealed:

- Genesis factor was found in 24 (24%);
- The external environment and teratogenic factors were found in 53 people (53%);
- The combination of arsenic genesis and the external environment, teratogenic factors was found in 20 people (20%).

The structure and mobility of the articulation apparatus. During a speech therapy examination, the structure and relevance of the articulatory apparatus of children with rhinolalia was first of all investigated. Then the condition for pronouncing the voice was carefully studied.

→ In addition, the status of phoneme perception has also been investigated. In other words, we considered it appropriate to conduct a speech therapy examination in the following steps.

The observation of facial muscles in a calm state begins:

- openness of the nose and lips, their symmetry;
- open or closed mouth;
- leakage of oral water;
- the nature of the lines of the lips and their compressibility;
- A strong movement of facial muscles (hyperkinesis) was noted.

Further, a review of the articulatory apparatus (lips, tongue, teeth, soft palate, jaw, hard palate), which is also important for characterizing the structure and anatomical defects of subsequent organs.

Checking the correct pronunciation should include two aspects.

1. Articulation - defines the features of speech sounds and involves the activity of the articulation organs in the pronunciation process.

2. The phonological goal is to determine how the child differentiates the system of speech sounds (phonemes) in various phonetic conditions. These two aspects are closely related.

Learning words begins with a thorough study of the pronunciation of sounds, followed by sounds in syllables, words and sentences. Tasks consisting of duplicating the same sound are repeated during the exam.

For speech therapy analysis, it is important to identify these

- Accurate articulation switching ability.
- The emergence of "average" articulation.
- Later, the registered child determines how the child uses the voice in his speech.
- The ability to pronounce simple and complex words in accordance with the structure of



the word is investigated in the logo. Four categories of speech defects: lack of sound, distortion, voice substitution, mixing.

In children, the absence of mainly articulated voices is often observed. Often this can be due to the fall of words in words and the inability of the child to pronounce them separately. This type of violation is considered a permanent defect. Sometimes children with good phonemic perception appear in some positions, and do not completely miss the sounds. This type of disorder is considered a permanent defect. Sometimes children with good phonemic perception will have an additional voice in some positions instead of completely throwing out sounds. Due to excessive articulation, a “pharyngeal” sound behind the tongue is considered typical. Often the missing voice is replaced by a distorted voice over time. Usually the jaw is deformed, jaw deformation and tooth displacement, underdeveloped upper lip, deformed nose, etc.

At all sounds of the articulation apparatus it is convenient and easy to carry out coordination actions. When pronouncing vowels, maximum jaw movement, a relaxed position of the tongue to the front teeth and increased inspiration in the mouth are maximized. In addition, it has been experimentally proven that vowels are better lit (25% on average) compared to summits. From the moment of working on the vowels I, I, with a kinesthetic sensation giving a feeling of “contradiction” in the position of the tongue’s front and back walls and the direction of this breath. These voids allow you to focus on the air flow in the front of the articulation system and direct it to the lower knives. The accuracy of kinesthetic sensations in the oral cavity and sensory breathing (in the lower lip) in the oral cavity during the early movement of the tongue helps the child move correctly, although it is initially impossible to rely on hearing perception and normal and nasal speech differentiation. Based on visual control and kinesthesia, indicating the state of the organs of speech, children get acquainted with the progression of the tongue, the degree of tension in the lips and cheeks, as well as breathing in the mouth.

In the process of evolution, human speech is formed through the control of hearing and direct hearing, so hearing and speech are closely related functions. During speech correction, the hearing consists of two parts: the child listens to someone else's speech and voice, that is, it reflects the adult's speech and listens to its own speech and voice.

Directing the child to compare the speaker with a distorted speech helps speed up normal pronunciation.

Regular hearing training, especially phonemic hearing, creates self-control of speech.

At the same time, it is important to remember that it is important to master the correct speech and lay the foundations of its standards at an early age (3-10 months). When communicating with the child and concentrating his attention on the speaker, it is necessary to activate the first vocalization before the speech: squeak, choking, bite. In practice, this process is carried out by listening to the correct speech of adults, which is beneficial for such people to always be near the child. Age does not mean that you should not first speak with the child. Auditory perception is the first step to mastering speech skills. In this case, adults must observe certain canons: speak as slowly as possible, but clearly, clearly and quickly, as often as possible, as often as possible. In this case, learning from early childhood stimulates and assimilates the skills of memorizing vocal patterns of words. Later, sound correction is also slow. This method not only stimulates the development of beneficial articulation in children with impairments. Test yourself, dear reader! Symptoms arising from the pronunciation of the word and the



appearance of hot breathing ("warming the hands") will be compression of the testicle bone and soft palate, as well as the posterior wall of the swallow (and fragments of the palate in children) and the removal of the tongue root. Such conditions make it possible to better absorb the intonation of speech and melody. When annoying signals do not cause weakening and inhibition of the nervous system and speech center, the child can easily adapt and reflect on the speech environment. The ability to visualize and evaluate your own voice when building a sound pronunciation is of great importance. This is quite difficult to achieve: the child does not hear himself, and to be more precise, he hears something else. This is completely true for him. That is why it is necessary to replace the "listener of the nose" with other means for self-control.

Self-listening is organized as follows:

1. Wash your arms and hands in the shape of a hand to capture water - a handful, and the first finger is firmly attached to the palm of your hand.
2. Without changing the position of the hemisphere of the hand, one of them (for example, the left hand) is placed behind the earpiece, while carefully pulling the upper part of the ear and tightly bending it to the cheeks. At this point, the elbows are leaning against the chest.
3. The other hand (on the right) also places the inside of the wrist of the wrist in the position of the left hand without changing the position and closes the mouth without touching the lips, with the exception of the first finger on the upper lip.

When the hands are in this position, a wave-like sound is created that connects the oral cavity with the ear. In this case, the child's own quiet voice is amplified, and obvious synchronization errors or any sound features are different and different. Using such aids while listening to your speech should not be used negatively: speak loudly or scream. For training, all speech materials (syllables, words, sentences) that do not contain M and N nasal sounds are accepted. Using the technique of "self-obedience", which learns very quickly, it detects and eliminates nostalgic speech, accustoms to fast speech, as well as to quick and short acceleration of consonants. An important feedback is gradually formed on the basis of auditory and muscle sensations.

Thus, it is important and necessary to adhere to the basic criteria for a comprehensive diagnosis of rhinology.

## References

1. Huseynov, N.T.; Agayeva T.K. Speech therapy, Baku, 2018.
2. Almazova E.S. On the issue of voice disorders. Essays on the pathology of speech and voice. M., Uchpedgiz, Vol. 1. pp.125-141.
3. Ippolitova A.G. Open rhinolalia: Textbook. Moscow., Education, 1983. 95 p.
4. Balakireva A.S. Speech Therapy. Rinolalia. Moscow. 2012. 208 p.
5. Kravtsova O.A. Cleft lips and palate. Health and education in the 21st century. 2012. V.14. No. 2. p. 112.
6. Lavrova E.V., Kopteva O.D., Uklonskaya D.V. Voice disturbance. Moscow. Academy, 2006. 128 p.